

Claims

- [c1] 1. An air bag module comprising:
- an air bag canister having a side wall, the side wall having a gas channel port therein to communicate with ambient air pressure;
 - an air bag cushion attached to the air bag canister;
 - an inflator attached to the air bag canister for providing gas;
 - a deployment door attached to the air bag canister;
 - a structural gas channel connected to the side wall proximate the gas channel port and configured to communicate with the gas channel port to provide venting of gas provided by the inflator to ambient air when the air bag cushion is in a substantially non-deployed condition;
 - and
 - a venting system connecting the structural gas channel to the gas channel port, the venting system having a plug and a plug pulling system connecting the air bag cushion and the plug;
 - wherein when the air bag cushion is deployed the plug pulling system pulls the plug into the gas channel port to prevent gas from venting therethrough.

- [c2] 2. The air bag module of claim 1 wherein the plug pulling system comprises a tether connecting the plug to the air bag cushion.
- [c3] 3. The air bag module of claim 1 wherein the plug pulling system comprises a bag-shaping tether connecting the air bag cushion to the air bag canister and a plug tether connecting the plug to the bag-shaping tether.
- [c4] 4. The air bag module of claim 1 wherein a plug centering guide is placed over the gas channel port.
- [c5] 5. The air bag module of claim 4 wherein the plug centering guide comprises a plurality of radial arms connected to a peripheral support having a guide hole.
- [c6] 6. The air bag module of claim 4 wherein the plug is pulled into the plug centering guide.
- [c7] 7. The air bag module of claim 1 wherein the structural gas channel is attached to the air bag canister covering the gas channel port and the venting system comprises a plug inside the structural gas channel, a plug centering guide inside the structural gas channel, and a plug pulling system connecting the air bag cushion to the plug wherein when the air bag cushion is deployed, the pulling system is made taut thereby pulling the plug into the plug centering guide preventing any gas from vent-

ing therethrough.

- [c8] 8. The air bag module of claim 7 wherein the plug pulling system comprises a tether connecting the plug to the air bag cushion.
- [c9] 9. The air bag module of claim 8 wherein the plug pulling system comprises a bag-shaping tether connecting the air bag cushion to the air bag canister and a plug tether connecting the plug to the bag-shaping tether.